



12.23.04

AF/3679 #
IPW

EXPRESS MAILING LABEL NO. EV511845143US
PATENT CASE NAME/NO. (SFI-1) 1280_001

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as Express Mail Label No. US511845143US addressed to: Mail Stop Appeal Brief, Commissioner of Patents, P. O. Box 1450, Alexandria, VA 22313-1450 on December 22, 2004.

Tammy S. Senecal
Tammy S. Senecal

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor: Mark E. Poole

Serial No: 09/818,470

Filing Date: 03/28/2001

Title: APPARATUS FOR
CONNECTING AND
SEALING DUCT SECTIONS

Confirmation No.: 9560

Group Art Unit: 3679

Examiner: Aaron Dunwoody

APPEAL BRIEF

MAIL STOP APPEAL BRIEF-PATENTS
Commissioner for Patents
Alexandria, VA 22313-1450

BRIEF ON APPEAL

This Brief supports the appeal to the Board of Patent Appeals and Interferences from the final rejection dated April 22, 2004, in the above-captioned application. Appellant filed a Notice of Appeal on October 22, 2004, concurrent with Appellant's Petition to Revive, and now submits this Brief in compliance with 37 C.F.R. § 1.192.

Pursuant to 37 C.F.R. § 1.192, the two-month period for filing an appeal brief tolls from the date of filing the Notice of Appeal, *i.e.*, October 22, 2004. This Appeal Brief is timely filed within the two-month period, which extends until December 22, 2004.

1. REAL PARTY IN INTEREST

The real party in interest is Stamped Fittings, Inc., a State of Delaware corporation. An assignment of the invention claimed in this application from the Appellant to Parrott

12/28/2004 WABDELRI 00000002 09818470
250.00 OP
01 FC:2402

Mechanical, Inc., a State of Idaho corporation, is recorded in the U.S. Patent and Trademark microfilm records at Reel 013162, Frame 0341. A subsequent assignment from Parrott Mechanical, Inc. to Stamped Fittings, Inc., a State of Delaware corporation, is recorded in the Assignment Division of the U.S. Patent and Trademark Office microfilm records at Reel 015471, Frame 0873. Accordingly, the real party in interest is Stamped Fittings, Inc.

2. RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to Appellant, Appellant's legal representative, or assignee, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

3. STATUS OF CLAIMS

Claims 1-7 are pending in the application; claims 1-4 and 6 stand finally rejected. Claim 5 stands allowed and claim 7 stands objected to as depending from a rejected base claim, but the Examiner indicated that Claim 7 also would be allowable if written in independent form, including all of the limitations of the base claim and any intervening claims.

Claims 1-4 and 6 were rejected in the Final Office Action dated April 22, 2004. The pending claims that are the subject of this Appeal are set forth in the attached Claims Appendix.

4. STATUS OF AMENDMENTS

No amendments were made following the Final Rejection.

5. SUMMARY OF CLAIMED SUBJECT MATTER

The present invention provides an apparatus for connecting and sealing duct sections, for use with round ducts, round oval ducts and other commonly used ducts. A preferred version of the apparatus includes identical first and second connectors associated with the first and second ducts to be connected, each connector including a tubular member having a cross-section corresponding to, and an outside diameter incrementally less than, the inside diameter of the duct to which it is to be attached.

In a preferred embodiment, an O-ring channel is defined in the tubular member, allowing an O-ring to be carried between the tubular member and the inside surface of the duct. A flange extends outward in a radial direction from an outer end of the tubular member. The flange and the tubular member are joined by a radially inner bend. The flange defines inner and outer annular surfaces.

A radially outer portion of the flange forms a rolled edge. The rolled edge results in a rounded perimeter that will not cut or injure the installer, and increases the strength and rigidity of the flange. As a result of the added strength, the outer annular surfaces of adjacent flanges may be positioned flush against each other without dents, bends or warps resulting in space between the surfaces. A tube cavity, defined within the rolled edge, allows for the optional installation of a wire, which results in still further stiffening of the rolled edge and annular flange.

In use, the apparatus includes first and second connectors attached to the ends of first and second duct sections to be connected. To make this connection, the outer surfaces of two adjacent annular flanges are positioned against each other. A plurality of fasteners, such as bolt/nut pairs or sheet metal screws, pass through holes defined in the flanges and connects the flanges together.

In some applications, a gasket is positioned between the outer annular surfaces. In other applications, duct sealer may be used instead of, or in addition to, the gasket. As the fasteners are tightened, excess duct sealer may be squeezed from between the flanges when the two outer annular surfaces of the two respective connectors are pressed together. In this circumstance, an excess duct sealer trough, defined between the rolled edges of two adjacent connectors, provides a location to which excess duct sealer is discharged. As a result, duct sealer does not foul the round perimeter.

The invention thus provides a novel apparatus for connecting and sealing duct sections, having a rolled edge defined on the outer edge of a radially directed flange, which results in a rigid flange having a planar surface which is not easily deformed, and which results in a rounded perimeter, which is unlikely to cut or injure. A further advantage is to provide an excess duct sealer containment trough whereby, when fasteners are attached to connect the annular flanges, the excess duct sealer carried between the annular flanges is

transferred to the excess duct sealer containment trough in a manner that prevents the rounded perimeter from becoming fouled with duct sealer.

6. **GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

1. Claims 1, 2 and 4 stand rejected under 35 U.S.C. 102(b), as being anticipated by Hermanson (US 5,983,496).

2. Claim 3 stands rejected under 35 U.S.C. 103(a), as being obvious over Hermanson (US 5,983,496) in view of Janakirama-Rao (US 4,913,472).

3. Claim 6 stands rejected under 35 U.S.C. 103(a), as being obvious over Hermanson (US 5,983,496) in view of Davis (US 5,016,925).

7. **ARGUMENTS**

(7.1)

**Hermanson Does Not Disclose Each And Every Element of
Appellant's Claim 1**

Claims 1, 2 and 4 stand rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,983,496 to Hermanson. Appellant respectfully requests that this Board reverse the rejection.

In order to avoid rejection for anticipation, it is only necessary to show that a claim contains at least one element not disclosed in a single prior art reference. Unless all of the same elements are found in exactly the same situation and united in the same way to perform the identical function in prior pleaded art, there can be no anticipation under the statute. Verdegaal Bros., Inc. v. Union Oil Co., 814 F.2d 628 (Fed. Cir. 1987).

Appellant's independent claim 1 recites an apparatus for connecting and sealing duct sections, said apparatus including, *inter alia*, a flange having a rolled edge, wherein "at the outer perimeter of the annular flange, the annular rounded perimeter is rounded inwardly, toward the outer end of the tubular member ... whereby a tube cavity is defined within the annular radially outer roll and annular rounded perimeter, and whereby an excess duct sealer trough is defined between rolled edges of the first and second connectors."

Hermanson does not disclose an apparatus that includes all of the claimed features of claim 1, rather, Hermanson discloses an apparatus entirely lacking a rolled edge, wherein the outer perimeter of the flange is hemmed or folded outwardly, away from the duct connection, rather than inwardly toward the duct connection. Hermanson does not disclose a tube cavity defined within the annular radially outer roll, nor does Hermanson disclose an excess duct sealer trough defined between rolled edges of the first and second connectors (particularly since Hermanson does not disclose rolled edges). Therefore, Hermanson fails to disclose each and every element of Appellant's claim 1.

Furthermore, Appellant observes that the apparatus of Hermanson would fail to function as required for the present invention. Indeed, as noted above, the true, outer perimeter of the Hermanson apparatus is folded outwardly (e.g., see hem 5 of return flange 6 in Figs. 2 and 4 of Hermanson), away from the duct connection before being folded back on itself, rather than being rolled inwardly toward the duct connection. Therefore, the Hermanson apparatus fails to form a true "tube cavity," as required in claim 1. Since claim 1 includes essential features not described by the cited art, there can be no anticipatory rejection and this rejection should be withdrawn. Dependent claims 2 and 4, being dependent from and further limiting independent claim 1, should be deemed allowable for the same reasons, as well as for the additional limitations recited therein.

Accordingly, Appellant respectfully requests that this Board reverse the rejection of claims 1, 2 and 4 under 35 USC § 102 as being anticipated by Hermanson.

(7.2)

**The Combination of Hermanson in View of Janakirama-
Rao Fails to Raise A *Prima Facie* Case of Obviousness
Against Claim 3**

Claim 3 stands rejected under 35 U.S.C. 103(a) as being obvious over Hermanson (US 5,983,496) in view of Janakirama-Rao (US 4,913,472). Appellant respectfully requests that this Board reverse the rejection.

In determining obviousness, the basic issue is whether applied references, alone or in any combination, suggest the claimed invention as a solution to the specific problem solved.

EXPRESS MAILING LABEL NO. EV511845143US
PATENT CASE NAME/NO. (SFI-1) 1280_001
APPEAL BRIEF

When the prior art itself does not suggest or render obvious the claimed solution to that problem, the art involved does not satisfy the criteria of 35 USC § 103 for precluding patentability. Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestion, or incentive supporting the combination. Carela v. Starlight Archery, 231 USPQ 644 (Fed. Cir. 1986).

When features of prior art references are combined to establish obviousness, the mere possibility of such a combination does not render the result of that combination obvious absent a logical reason of record which justifies the combination. *In re Regel*, 526 F.2d 1399, 188 USPQ 136 (CCPA 1975). Instead, references may only be modified when (1) the prior art would have suggested to those of ordinary skill in the art that they should make the claimed composition or perform the claimed process, and (2) that those of ordinary skill in the art would have a reasonable expectation of success of making the claimed composition or performing the claimed process. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

Thus, there must be a reason apparent to one skilled in the art at the time of the invention for applying the teaching at hand, or the use of the teaching as evidence of obviousness entails prohibited hindsight; that is, advance knowledge of the invention. Graham v. John Deere Co., 383 US 1, 148 USPQ 459 (1966). A fairly recent case from the CAFC amplifies this basic tenet and is quoted at length here.

"Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references. See, e.g., C.R. Bard, Inc. v. M3 Sys., Inc., 157 F.3d 1340, 1352, 48 USPQ2d 1225, 1232 (Fed. Cir. 1998) (describing "teaching or suggestion or motivation [to combine]" as an "essential evidentiary component of an obviousness holding"); In re Rouffet, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998) ("the Board must identify specifically . . . the reasons one of ordinary skill in the art would have been motivated to select the references and combine them"); In re Fritch, 972 F.2d 1260, 1265, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992) (examiner can satisfy burden of obviousness in light of combination "only by showing some objective teaching [leading to the combination]"); In re Fine, 837 F.2d 1071, 1075, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988) (evidence of teaching or suggestion "essential" to avoid hindsight); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 297, 227 USPQ 657, 667 (Fed. Cir. 1985) (district court's conclusion of

EXPRESS MAILING LABEL NO. EV511845143US
PATENT CASE NAME/NO. (SFI-1) 1280_001
APPEAL BRIEF

obviousness was error when it "did not elucidate any factual teachings, suggestions or incentives from this prior art that showed the propriety of combination". See also Graham, 383 U.S. at 18, 148 USPQ at 467 ("strict observance" of factual predicates to obviousness conclusion required). Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability--the essence of hindsight. See, e.g., Interconnect Planning Corp. v. Feil, 774 F.2d 1132, 1138, 227 USPQ 543, 547 (Fed. Cir. 1985) ("The invention must be viewed not with the blueprint drawn by the inventor, but in the state of the art that existed at the time."). In this case, the Board fell into the hindsight trap.

We have noted that evidence of a suggestion, teaching, or motivation to combine may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, from the nature of the problem to be solved, see Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc., 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1630 (Fed. Cir. 1996), Para-Ordinance Mfg. v. SGS Imports Intern., Inc., 73 F.3d 1085, 1088, 37 USPQ2d 1237, 1240 (Fed. Cir. 1995), although "the suggestion more often comes from the teachings of the pertinent references," Rouffet, 149 F.3d at 1355, 47 USPQ2d at 1456. The range of sources available, however, does not diminish the requirement for actual evidence. That is, the showing must be clear and particular. See, e.g., C.R. Bard, 157 F.3d at 1352, 48 USPQ2d at 1232. Broad conclusory statements regarding the teaching of multiple references, standing alone, are not "evidence." E.g., McElmurry v. Arkansas Power & Light Co., 995 F.2d 1576, 1578, 27 USPQ2d 1129, 1131 (Fed. Cir. 1993) ("Mere denials and conclusory statements, however, are not sufficient to establish a genuine issue of material fact."); In re Sichert, 566 F.2d 1154, 1164, 196 USPQ 209, 217 (CCPA 1977) ("The examiner's conclusory statement that the specification does not teach the best mode of using the invention is unaccompanied by evidence or reasoning and is entirely inadequate to support the rejection."). In addition to demonstrating the propriety of an obviousness analysis, particular factual findings regarding the suggestion, teaching, or motivation to combine serve a number of important purposes, including: (1) clear explication of the position adopted by the Examiner and the Board; (2) identification of the factual disputes, if any, between the applicant and the Board; and (3) facilitation of review on appeal. Here, however, the Board did not make particular findings regarding the locus of the suggestion, teaching, or motivation to combine the prior art references."

In re Dembiczak, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999).

The Examiner has combined the features of the invention from Hermanson with the features of the invention of Janakirama-Rao to reject claim 3. Appellant respectfully points out several problems with this purported combination.

First, it is duly noted that, in order to establish a *prima facie* case of obviousness, the Examiner must establish that the prior art provides some teaching, suggestion or motivation to combine or modify the cited references, as described in Appellant's disclosure, otherwise, the Examiner is using impermissible hindsight to reject the claims. Further, the Examiner must show that one of ordinary skill in the art would have a reasonable expectation of success in making the claimed invention. Secondly, it is noted that the Examiner is required to support the obviousness rejection with actual evidence, as opposed to mere conclusory statements. See In re Zurko, 142 F.3d 1447, 46 USPQ2d 1691 (Fed. Cir., 1998).

The arguments above as to the novelty of independent claim 1 are repeated here by reference. Furthermore, Appellant observes that the apparatus of Hermanson would fail to function as required for the present invention. Indeed, as noted above, the true, outer perimeter of the Hermanson flange is **folded outwardly**, away from the duct connection, rather than being **rolled inwardly** toward the duct connection. Therefore, the Hermanson flange fails to form a true "tube cavity," which must function to conceal the "excess duct sealer trough", as required in claim 3.

It is respectfully submitted that there is no motive to modify or combine the references, as the Examiner suggests, either disclosed or suggested anywhere in the prior art of record. Furthermore, the Examiner has provided no evidence to support the conclusion of obviousness. More particularly, in regard to claim 3, the Examiner asserts that it would have been obvious to provide the duct sections of Hermanson with a duct sealer trough, as taught by Janakirama-Rao. However, the Examiner has not provided any evidence whatsoever showing that the prior art teaches or suggests that such combination should be made, or that one of ordinary skill in the art would have a reasonable expectation of success.

Moreover, even if one were to combine the references, as suggested by the Examiner, such combination would not result in the invention that is claimed by Appellant. More particularly, the combination of Hermanson with Janakirama-Rao would not result in a duct having a duct sealer trough and a flange, wherein the outer perimeter of the flange rolls inwardly, toward the duct connection, rather than outwardly away from the duct connection, as required by Appellant's claim 3. Thus, the cited combination of references would not result

in Appellant's invention, even assuming *arguendo* there were some motivation to combine the references as suggested by the Examiner.

Accordingly, Appellant respectfully requests that this Board reverse the rejection of claim 3 under 35 U.S.C. 103(a) as being unpatentable over Hermanson in view of Janakirama-Rao.

(7.3)

**The Combination of Hermanson in View of Davis Fails to
Raise A *Prima Facie* Case of Obviousness Against Claim 6**

Claim 6 stands rejected under 35 U.S.C. 103(a) as being as being obvious over Hermanson (US 5,983,496) in view of Davis (US 5,016,925) Appellant respectfully requests that this Board reverse the rejection.

The arguments above as to the novelty of claim 1 and non-obviousness of claims 1 and 3 are repeated here by reference.

It is respectfully submitted that there is no motive to modify or combine the references, as the Examiner suggests, that is either disclosed or suggested anywhere in the prior art of record. Furthermore, the Examiner has provided no evidence to support a conclusion of *prima facie* obviousness, as required by the statute. More particularly, in regard to claim 6, the Examiner asserts that it would have been obvious to fabricate the duct section of Hermanson to include an O-ring channel on an outer surface, to form a watertight seal, as taught by Davis. However, the Examiner has not provided any evidence whatsoever showing that the prior art teaches or suggests that such combination should be made, or that one of ordinary skill in the art would have a reasonable expectation of success.

Moreover, Davis does not cure the deficiencies of Hermanson. Although forming a watertight seal apparently is a motive in Davis, this is not the problem that is solved by the present invention. If that were the problem to be solved, the present invention would not have been invented. Moreover, even if one were to combine the references, as suggested by the Examiner, such combination would not result in the invention that is being claimed by Appellant, in that essential claimed features would still be missing, in spite of the

combination. More particularly, the combination of Hermanson with Davis would merely result in a duct having an O-ring channel and a flange, wherein the outer perimeter of the flange is folded outwardly, away from the duct connection, rather than being rolled inwardly toward the duct connection, as required by Appellant's claims 1 and 6. Thus, the cited combination of references would not result in Appellant's invention, even if there were some motivation to combine the references as suggested by the Examiner.

Accordingly, Appellant respectfully requests that this Board reverse the rejection of claim 6 under 35 U.S.C. 103(a) as being unpatentable over Hermanson in view of Davis.

8. **CONCLUSION**

In conclusion, Appellant respectfully requests that this Board reverse of each of the grounds of rejection maintained by the Examiner in the Final Rejection.

Appellant believes that no extension of time is necessary to make this Appeal Brief timely. Should Appellant be in error, Appellant respectfully requests that the Office grant such time extension pursuant to 37 C.F.R. § 1.136(a) as necessary to make this Appeal Brief timely, and hereby authorizes the Office to charge any necessary fee or surcharge with respect to said time extension to the deposit account of the undersigned firm of attorneys, **Deposit Account No. 50-0289**.

Please direct any questions or comments to Thomas T. Aquilla at (607) 256-1950.

Date:

12/22/2004

Respectfully submitted,
WALL MARJAMA & BILINSKI LLP



Thomas T. Aquilla
Registration No. 43,473
WALL MARAJMA & BILINSKI LLP
101 S. Salina Street
Suite 400
Syracuse, NY 13202

(A1)
CLAIMS APPENDIX
Claims on Appeal

1. An apparatus for connecting and sealing duct sections, the apparatus comprising:
 - (A) first and second connectors, each connector comprising:
 - (a) a tubular member;
 - (b) an annular flange, extending radially outwardly from an outer end of the tubular member; and
 - (c) a rolled edge, comprising:
 - (i) an annular radially inner bend, attached to the outer perimeter of the annular flange;
 - (ii) an annular radially outer roll, adjacent to the radially inner bend;
 - (iii) an annular rounded perimeter, adjacent to the annular radially outer roll and at the outer perimeter of the annular flange, the annular rounded perimeter is rounded inwardly, toward the outer end of the tubular member; and
 - (iv) whereby a tube cavity is defined within the annular radially outer roll and annular rounded perimeter;
 - (B) whereby an excess duct sealer trough is defined between rolled edges of the first and second connectors; and
 - (C) a plurality of fasteners connecting the annular flange of the first connector to the annular flange of the second connector.

(A1)
CLAIMS APPENDIX
Claims on Appeal

1. An apparatus for connecting and sealing duct sections, the apparatus comprising:
 - (A) first and second connectors, each connector comprising:
 - (a) a tubular member;
 - (b) an annular flange, extending radially outwardly from an outer end of the tubular member; and
 - (c) a rolled edge, comprising:
 - (i) an annular radially inner bend, attached to the outer perimeter of the annular flange;
 - (ii) an annular radially outer roll, adjacent to the radially inner bend;
 - (iii) an annular rounded perimeter, adjacent to the annular radially outer roll and at the outer perimeter of the annular flange, the annular rounded perimeter is rounded inwardly, toward the outer end of the tubular member; and
 - (iv) whereby a tube cavity is defined within the annular radially outer roll and annular rounded perimeter;
 - (B) whereby an excess duct sealer trough is defined between rolled edges of the first and second connectors; and

annular rounded perimeter is rounded inwardly, toward the outer end of the tubular member;

(iv) whereby a tube cavity is defined within the annular radially outer roll and annular rounded perimeter; and

(v) a wire rod, carried within the tube cavity;

(B) whereby an excess duct sealer trough is defined between rolled edges of the first and second connectors;

(C) a gasket, carried between outer annular surfaces of the annular flanges of the first and second connectors, the gasket having a first side surface directed toward the outer annular surface of the first connector and a second side surface directed toward the outer annular surface of the second connector;

(D) a duct sealer, carried firstly between the first side surface of the gasket and the outer annular surface of the annular flange of the first connector, and carried secondly between the second side surface of the gasket and the outer annular surface of the annular flange of the second connector, and carried thirdly tamed in the excess duct sealer trough defined between the rolled edges of the first and second connectors; and

(E) a plurality of fasteners connecting the annular flange of the first connector to the annular flange of the second connector.

6. The apparatus for connecting and sealing duct sections of claim 1, additionally comprising:

(A) an O-ring channel defined on an outer surface of the tubular member, the O-ring channel for receiving an O-ring.

EXPRESS MAILING LABEL NO. EV511845143US
PATENT CASE NAME/NO. (SFI-1) 1280_001
APPEAL BRIEF

7. The apparatus for connecting and sealing duct sections of claim 1, additionally comprising:

(A) a wire rod, carried within the tube cavity.

EXPRESS MAILING LABEL NO. EV511845143US
PATENT CASE NAME/NO. (SFI-1) 1280_001
APPEAL BRIEF

(A2)

EVIDENCE APPENDIX

Copies of any evidence entered and relied upon in the appeal.

NONE

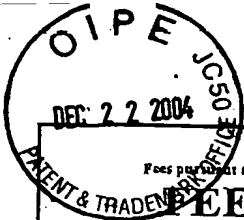
EXPRESS MAILING LABEL NO. EV511845143US
PATENT CASE NAME/NO. (SFI-1) 1280_001

(A3)

RELATED PROCEEDINGS APPENDIX

Copies of decisions rendered by a court or the Board in any proceeding identified in the related appeals and interferences section.

NONE



Under the Paperwork Reduction Act of 1995 no persons are required to respond to a collection of information unless it displays a valid OMB control number

Approved for use through 07/31/2006. OMB 0631-0032
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Effective on 12/08/2004.
Fees payable to the Consolidated Appropriations Act. 2005 (H.R. 4818).

FREE TRANSMITTAL For FY 2005

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT \$250.00

Express Mail Label EV511845143US

Complete if Known

Application Number	09/818,470
Filing Date	March 28, 2001
First Named Inventor	Mark E. Poole
Examiner Name	Aaron Dunwoody
Art Unit	3679
Attorney Docket No.	1280-001 (SFI-1)

METHOD OF PAYMENT (check all that apply)

☒ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____
☒ Deposit Account Deposit Account Number: 50-0289 Deposit Account Name: Wall Mariama & Bilinski LLP

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☐ Charge fee(s) indicated below ☐ Charge fee(s) indicated below, except for the filing fee
☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 ☒ Credit any overpayments

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	Fee (\$)	Small Entity Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	Fee (\$)	Small Entity Fee (\$)
Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent	50	25
Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent	200	100
Multiple dependent claims	360	180
Total Claims		
- 20 or HP =	x	=
HP = highest paid number of total claims paid for, if greater than 20		
Indep. Claims		
- 3 or HP =	x	=
HP = highest number of independent claims paid for, if greater than 3		

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a) (1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
- 100 =	/ 50 =	(round up to a whole number)	x	=

4. OTHER FEES

Non-English Specification, \$130 fee (no small entity discount)	Fees Paid (\$)
Other: Appeal Brief Fee	\$250.00

SUBMITTED BY

Signature	<i>Thomas T. Aquilla</i>	Registration No. 43,473 (Attorney/Agent)	Telephone 315-425-9000
Name (Print/Type)	Thomas T. Aquilla		Date December 22, 2004

This collection of information is required by 37 CFR 1.134. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.